# Position Details

## Research Projects- CSOF6

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| The following information is for applicants | |
| Advertised Job Title | Solutions Architect |
| Job Reference | 96356 |
| Tenure | Specified Term of 3 years  Full-time |
| Salary Range | AU$126k - AU$148k per annum (pro-rata for part-time)  plus up to 15.4% superannuation |
| Location(s) | Brisbane (Pullenvale) with work from home/flexibility offered |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian Citizens Only |
| Position reports to the | Team Leader |
| Client Focus – Internal | 80% |
| Client Focus – External | 20% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Nicole Poole via email [nicole.poole@csiro.au](mailto:nicole.poole@csiro.au) or phone on +61 2 9490 5618 |
| How to apply | Apply online at <https://jobs.csiro.au/>  Internal applicants, please apply via **Jobs Central**  If you experience difficulties when applying, please email [careers.online@csiro.au](mailto:careers.online@csiro.au) or call 1300 984 220. |

**Acknowledgement of Country**

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the areas that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present. View our [vision towards reconciliation](https://www.csiro.au/en/about/Indigenous-engagement/Reconciliation-Action-Plan).

**Child Safety**

CSIRO is committed to the safety and wellbeing of all children and young people involved in our activities and programs. View our [Child Safe Policy](https://www.csiro.au/en/about/policies/child-safe-policy).

### Role Overview

The role of Research Projects staff in CSIRO is to collaborate in scientific and technological activities with other research staff usually by assisting with detailed planning, undertaking or assisting with experimental, observational or technology development work, and in carrying out the more practical aspects of the work. At senior levels, Research Projects staff may be involved in providing consulting services, science and technology management and/or industry liaison.

Digital integration is a key component in CSIRO’s Mineral Resources strategy to increase industry competitiveness and drive social and environmental performance. As part of the Orebody Knowledge Impact Area, we are developing the VoxelNET platform, a spatial data platform with a range of applications e.g., ore tracking, mining value chain modelling, UAV collision avoidance, and space mining amongst others.

### Duties and Key Result Areas

The successful candidate will need to ensure that they can communicate clearly with clients, partners, and staff at several different levels of seniority. The Solutions Architect role provides a unique skill set that has several benefits and value to the Business Unit over a 3-year term.

* By collaborating with stakeholders, understanding business requirements, and leveraging technological expertise, the Solutions Architect plays a pivotal role in driving innovation and ensuring long-term success.
* The role focuses on impact-driven development and user-centric software design, where specific use cases need to be solved, and comprises a great deal of interaction design, which bridges the gap between User Experience and User Interface design.
* Aside from the development of the VoxelNET MVP, there is an expectation that additional applications will be built that leverage the core feature set of the platform, this role will be indispensable in navigating the complex challenges that we are trying to solve.
* The role bridges the gap between business needs and technical capabilities, orchestrating the design and implementation of strategic solutions that align with the long-term vision of any project not just VoxelNET.
* Act as a trusted advisor and demonstrate creativity to determine and anticipate client or project needs.
* Identify and adapt quickly to changes in client or project needs and changes in the external environment.
* Communicate openly, effectively, and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Work collaboratively as part of a multi-disciplinary, regionally dispersed research team to carry out tasks in support of CSIRO’s scientific objectives.
* Adhere to the spirit and practice of CSIRO’s Values, Code of Conduct, Health, Safety and Environment procedures and policy and diversity initiatives.
* Other duties as directed.

## **Selection Criteria**

#### Essential

*Under CSIRO policy only those who meet all essential criteria can be appointed.*

1. High level of proficiency with 3D game engines, web APIs and Event-Driven Architecture.
2. C# object-oriented programming and scripting language skills.
3. Proficient in developing application software, using modern engineering practices to architect and collaborate on developing, deploying, and monitoring web applications in a live production environment.
4. Expert in cooperating with others to achieve organisational objectives and may share team resources to do this. Collaborates with other teams as well as industry colleagues.

Ability to anticipate and adapt to new information in ambiguous situations. Develops and selects an appropriate course of action and provides for contingencies. Evaluate, interpret and integrate complex bodies of information and draw logical conclusions, synthesise proposals and defend positions with reasoned arguments.

1. Demonstrated aptitude in the delivery of quality results, that are aligned with project and business activities, research and/or technology directions and able to act in a key advisory role in decisions concerning scientific and/or technological direction.

Proven capability to remain flexible in response to external change or when faced with external constraints, and ability to identify and promote the opportunities arising as a result of change.

## **Desirable**

1. Interest in AI and Machine Learning, and the ability to craft solutions that leverage their application.
2. History of leading the design and implementation of digital twin solutions, resulting in industry-validated value propositions.
3. A deliberate and focused attitude towards collaboration and creating a generative culture in diverse teams.
4. Expertise at leveraging advanced scientific research to design and build a digital twin platform, demonstrating a deep understanding of software development concepts.
5. Effective at communicating complex scientific and software development concepts to stakeholders and investors through clear presentations and documentation, ensuring a shared understanding of the project's value.
6. Evidence of providing hands-on guidance to multidisciplinary development teams, facilitating collaboration, and achieving key software functionality milestones, while contributing to critical architectural decisions.

## **Required Competencies**

* **Teamwork and Collaboration:** Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other team as well as industry colleagues.
* **Influence and Communication:** Identifies critical stakeholders and influences them via an influential third party, for example through an established network, to gain support for sometimes contentious, proposals / ideas.
* **Resource Management/Leadership:** Sets up and maintains effective and efficient work teams and manages performance and resources, to achieve objectives. Chooses appropriate management strategies and communication styles to maintain high levels of motivation and productivity. Gives feedback for development purposes and provides support and direction for improvement.
* **Judgement and Problem Solving:** Anticipates and manages problems in ambiguous situations. Develops and selects an appropriate course of action and provides for contingencies. Evaluates, interprets and integrates complex bodies of information and draws logical conclusions, synthesises proposals and defends options with reasoned arguments.
* **Independence:** Assesses the risk and opportunity of identified strategies, options and actions. Overcomes problems and setbacks in achieving goals. Invariably includes consideration of value-added future impact on bottom line when determining the optimal and efficient use of resources.
* **Adaptability:**Demonstrates flexibility in thinking and adapts to and manages the increasing rate of organisational change by adjusting strategies, goals and priorities.

Special Requirements

Appointment to this role is subject to provision of a pre-employment background check and may be subject to other security/medical/character clearance requirements.

* The successful candidate will undertake a pre-employment background check. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and CSIRO [Mineral Resources](https://www.csiro.au/en/Research/MRF) for more information.

CSIRO is a values-based organisation.  In your application and at interview you will need to demonstrate behaviours aligned to our values of:

* People First
* Further Together
* Making it Real
* Trusted